ABSTRACT OF THE DISCLOSURE

Provided is an electron beam system, in which an electron beam emitted from an electron gun is irradiated to a stencil mask, and the electron beam that has passed through the stencil mask is magnified by an electron lens and then detected by a detector having a plurality of pixels so as to form an image of the sample. Further provided is an electron beam system, in which a primary electron beam emitted from an electron gun is directed to a sample surface of a sample prepared as a subject to be inspected, and an electron image formed by a secondary electron beam emanated from the sample is magnified and detected, wherein an NA aperture is disposed in a path common to both of the primary electron beam and the secondary electron beam. An electron lens is disposed in the vicinity of a sample surface, and in this arrangement, a crossover produced by the electron gun, the electron lens and the NA aperture may be in conjugate relationships relative to each other with respect to the primary electron beam.